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for potency, moisture, pH, oxacillin content, crystallinity, and identity.

- (b) The batch for potency, sterility, pyrogens, moisture, and pH.
 - (ii) Samples required:
- (a) The oxacillin sodium monohydrate used in making the batch: 10 packages, each containing approximately 300 milligrams.
 - (b) The batch:
- (1) For all tests except sterility: A minimum of 10 immediate containers.
- (2) For sterility testing: 20 immediate containers, collected at regular intervals throughout each filling operation, or 40 immediate containers if each contains less than 600 milligrams.
- (b) Tests and methods of assay—(1) Potency—(i) Sample preparation. Reconstitute as directed in the labeling. Then using a suitable hypodermic needle and syringe, remove all of withdrawable contents if it is represented as a single-dose container, or, if the labeling specifies the amount of potency in a given volume of the resultant preparation, remove an accurately measured representative portion from each container. Dilute with 1 percent potassium phosphate buffer, pH 6.0 (solution 1), to give a stock solution of convenient concentration.
- (ii) Assay procedures. Use either of the following methods; however, the results obtained from the microbiological agar diffusion assay shall be conclusive.
- (a) Microbiological agar diffusion assay. Proceed as directed in § 436.105 of this chapter, diluting an aliquot of the stock solution with solution 1 to the reference concentration of 5 micrograms of oxacillin per milliliter (estimated).
- (b) Iodometric assay. Proceed as directed in §436.204 of this chapter, diluting an aliquot of the stock solution with solution 1 to the prescribed concentration.
- (2) Sterility. Proceed as directed in § 436.20 of this chapter, using the method described in paragraph (e)(1) of that
- (3) *Pyrogens.* Proceed as directed in §436.32(a) of this chapter, using a solution containing 20 milligrams of oxacillin per milliliter.
 - (4) [Reserved]

- (5) *Moisture.* Proceed as directed in §436.201 of this chapter.
- (6) *pH.* Proceed as directed in §436.202 of this chapter, using an aqueous solution containing 30 milligrams per milliliter.

[39 FR 18976, May 30, 1974, as amended at 42 FR 59868, Nov. 22, 1977; 50 FR 19918, 19919, May 13, 1985. Redesignated at 55 FR 279, Jan. 4, 1990]

§ 440.249b Oxacillin sodium injection.

- (a) Requirements for certification—(1) Standards of identity, strength, quality, and purity. Oxacillin sodium injection is a frozen aqueous, iso-osmotic solution of oxacillin sodium which may contain one or more suitable and harmless buffer substances and a tonicity adjusting agent. Each milliliter contains oxacillin sodium equivalent to 20 or 40 milligrams of oxacillin. Its oxacillin content is satisfactory if it is not less than 90 percent and not more than 115 percent of the number of milligrams of oxacillin that it is represented to contain. It is sterile. It is nonpyrogenic. Its pH is not less than 6.0 and not more than 8.5. The oxacillin sodium monohydrate used conforms to standards prescribed §440.49(a)(1), except that the pH of an aqueous solution containing 30 milligrams per milliliter is not less than 4.0 and not more than 7.0.
- (2) Labeling. It shall be labeled in accordance with the requirements of §432.5 of this chapter. In addition, this drug shall be labeled "oxacillin sodium injection".
- (3) Requests for certification: samples. In addition to complying with the requirements of §431.1 of this chapter, each such request shall contain:
 - (i) Results of tests and assays on:
- (A) The oxacillin sodium monohydrate used in making the batch for potency, moisture, pH, oxacillin content, crystallinity, and identity.
- (B) The batch for oxacillin content, sterility, pyrogens, and pH.
- (ii) Samples, if required by the Center for Drug Evaluation and Research:
- (A) The oxacillin sodium monohydrate used in making the batch: 10 packages, each containing approximately 300 milligrams.
 - (B) The batch:

- (1) For all tests except sterility: A minimum of 10 immediate containers.
- (2) For sterility testing: 20 immediate containers, collected at regular intervals throughout each filling operation.
- (b) *Tests and methods of assay.* Thaw the sample as directed in the labeling. he sample solution used for testing must be at room temperature.
- (1) Oxacillin content. Proceed as directed in §440.249a(b)(1), except use the thawed solution.
- (2) Sterility. Proceed as directed in §436.20 of this chapter, using the method described in paragraph (e)(1) of that section.
- (3) *Pyrogens.* Proceed as directed in §436.32(a) of this chapter, except inject a sufficient volume of the undiluted solution to deliver 20 milligrams of oxacillin per kilogram.
- (4) pH. Proceed as directed in §436.202 of this chapter, using the undiluted solution.

[55 FR 279, Jan. 4, 1990; 55 FR 2481, Jan. 24, 1990]

§ 440.255 Penicillin G benzathine injectable dosage forms.

§ 440.255b Sterile penicillin G benzathine suspension.

- (a) Requirements for certification—(1) Standards of identity, strength, quality, purity. Sterile penicillin benzathine suspension is an aqueous suspension of penicillin G benzathine and one or more suitable suspending or dispersing agents, buffer substances, and preservatives. Each container or each milliliter contains penicillin G benzathine equivalent to not less than 300,000 units of penicillin G. Its potency is satisfactory if it is not less than 90 percent and not more than 115 percent of the number of units of penicillin G that it is represented to contain. It is sterile. It is nonpyrogenic. Its pH is not less than 5.0 and not more than 7.5. The penicillin G benzathine used conforms standards prescribed the § 440.55a(a)(1).
- (2) Labeling. It shall be labeled in accordance with the requirements of § 432.5 of this chapter.
- (3) Requests for certification; samples. In addition to complying with the requirements of §431.1 of this chapter, each such request shall contain:

- (i) Results of tests and assays on:
- (a) The penicillin G benzathine used in making the batch for potency, moisture, pH, penicillin G content, and crystallinity.
- (b) The batch for potency, sterility, pyrogens, and pH.
 - (ii) Samples required:
- (a) The penicillin G benzathine used in making the batch: 10 packages, each containing approximately 300 milligrams.
 - (b) The batch:
- (1) For all tests except sterility: A minimum of 10 immediate containers.
- (2) For sterility testing: 20 immediate containers, collected at regular intervals throughout each filing operation.
- (b) Tests and methods of assay—(1) Potency. Use either of the following methods; however, the results obtained from the iodometric assay shall be conclusive
- (i) Microbiological agar diffusion assay. Proceed as directed in §436.105 of this chapter, preparing the sample for assay as follows: Using a suitable hypodermic needle and syringe, remove all of the withdrawable contents if it is represented as a single-dose container; or, if the labeling specifies the amount of potency in a given volume, remove an accurately measured representative portion from each container. Dilute the portion thus obtained with sufficient absolute methyl alcohol to give a solution of convenient concentration. Immediately further dilute with 1 percent potassium phosphate buffer, pH 6.0 (solution 1), to the reference concentration of 1.0 unit of penicillin G per milliliter (estimated).
- (ii) *Iodometric assay.* Using a suitable hypodermic needle and syringe, remove all of the withdrawable contents if it is represented as a single-dose container; or if the labeling specifies the amount of potency in a given volume, remove an accurately measured representative portion from each container. Using the sample thus obtained, proceed as directed in § 436.204(b) (2) of this chapter.
- (2) Sterility. Proceed as directed in §436.20 of this chapter, using the method described in paragraph (e)(2) of that section, except use medium C in lieu of medium A, and medium F in lieu of